WHAT IS CLAIMED IS:

1   1.   A content storage method for use in a content distribution
2   network, the content distribution network providing broadcast video programming
3   over the network to a plurality of users in accordance with a broadcasting schedule,
4   the method comprising:
5   establishing a personal file locker on the network for a user, the file
6   locker including network storage space allocated for personal use by the user;
7   establishing a content-storage-request database for tracking requests
8   by the user for placing broadcast video programs into the user's file locker for
9   personal use by the user;
10   upon the broadcasting of a video program for which there exists a
11   request by the user to place the video program into the user's file locker, storing that
12   video program in the user's file locker; and
13   making the stored video program available to the user for viewing.

1   2.   The method of claim 1 wherein the personal file locker is a
2   construct created to hold the user's content, and wherein the method further
3   comprises:
4   establishing a file-locker database for storing a description of the file
5   locker construct.

1   3.   The method of claim 1 wherein the content-storage-request
2   database has entries corresponding to scheduled video programs, and wherein the
3   method further comprises:
4   upon the occurrence of a content request by the user for a program,
5   adding a pointer to the content-storage-request database entry for the requested
6   program, the pointer designating the requesting user's file locker; and
7   upon the broadcasting of the requested program, storing the requested
8   program in the user's file locker.

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1   4. The method of claim 3 wherein the personal file locker is a
2 construct created to hold the user's content, and wherein the method further
3 comprises:
4   establishing a file-locker database for storing a description of the file
5 locker construct, wherein the added pointer points to the entry in the file-locker
6 database for the requesting user's file locker.

1   5. The method of claim 4 further comprising:
2   annotating the entry in the file-locker database for the requesting
3 user's file locker to note the presence of the pointer.

1   6. The method of claim 5 further comprising:
2   upon the occurrence of a request by the user to delete the previous
3 content request by the user, removing the previously added pointer and removing
4 the annotation.

1   7. The method of claim 1 wherein the content distribution network
2 generally makes video programming available over the network to the plurality of
3 users, and wherein the method further comprises:
4   tracking requests by the user for placing available video programs
5 into the user's file locker for personal use by the user; and
6   upon the general making available of a video program for which there
7 exists a request by the user to place the video program into the user's file locker,
8 storing that video program in the user's file locker.

1   8. The method of claim 1 further comprising:
2   authenticating a request by the user to view the available stored video
3 program to authenticate the requesting user.

1   9. The method of claim 1 further comprising:
2   providing the available stored video program to the user for viewing;
3 and
4   during viewing, providing pause, rewind, and fast forward features.

1   10. A content storage system for use in a content distribution

2   network, the content distribution network providing broadcast video programming

3   over the network to a plurality of users in accordance with a broadcasting schedule,

4   the system comprising:

5   a personal file locker on the network for a user, the file locker being

6   a construct created to hold the user's content and including network storage space

7   allocated for personal use by the user;

8   a content-storage-request database for tracking requests by the user

9   for placing broadcast video programs into the user's file locker for personal use by

10   the user; and

11   computer instructions executable by a computer on the network to,

12   upon the broadcasting of a video program for which there exists a request by the

13   user to place the video program into the user's file locker, store that video program

14   in the user's file locker, and make the stored video program available to the user for

15   viewing.

1   11. The system of claim 10 further comprising:

2   a file-locker database for storing a description of the file locker

3   construct.

1   12. The system of claim 10 wherein the content-storage-request

2   database has entries corresponding to scheduled video programs, and wherein the

3   system further comprises:

4   computer instructions executable by a computer on the network to,

5   upon the occurrence of a content request by the user for a program, add a pointer

6   to the content-storage-request database entry for the requested program, the pointer

7   designating the requesting user's file locker; and

8   computer instructions executable by a computer on the network to,

9   upon the broadcasting of the requested program, store the requested program in the

10   user's file locker.

1   13. The system of claim 12 further comprising:

2   a file-locker database for storing a description of the file locker

3   construct, wherein the added pointer points to the entry in the file-locker database

4   for the requesting user's file locker.

1   14. The system of claim 13 further comprising:

2   computer instructions executable by a computer on the network to

3   annotate the entry in the file-locker database for the requesting user's file locker to

4   note the presence of the pointer.

1   15. The system of claim 14 further comprising:

2   computer instructions executable by a computer on the network to,

3   upon the occurrence of a request by the user to delete the previous content request

4   by the user, remove the previously added pointer and remove the annotation.

1   16. The system of claim 10 wherein the content distribution network

2   generally makes video programming available over the network to the plurality of

3   users, and wherein the system further comprises:

4   computer instructions executable by a computer on the network to

5   track requests by the user for placing available video programs into the user's file

6   locker for personal use by the user; and

7   computer instructions executable by a computer on the network to,

8   upon the general making available of a video program for which there exists a

9   request by the user to place the video program into the user's file locker, store that

10   video program in the user's file locker.

1   17. The system of claim 10 further comprising:

2   computer instructions executable by a computer on the network to

3   authenticate a request by the user to view the available stored video program to

4   authenticate the requesting user.

1   18. The system of claim 10 further comprising:

2   computer instructions executable by a computer on the network to

3   provide the available stored video program to the user for viewing; and

4   computer instructions executable by a computer on the network to,

5   during viewing, providing pause, rewind, and fast forward features.

1   19.   A content storage method for use in a content distribution

2   network, the content distribution network providing broadcast video programming

3   over the network to a plurality of users in accordance with a broadcasting schedule,

4   the method comprising:

5   establishing a plurality of personal file lockers on the network for a

6   plurality of users, each file locker including network storage space allocated for

7   personal use by the corresponding user;

8   establishing a content-storage-request database for tracking requests

9   by the plurality of users for placing broadcast video programs into their file lockers

10   for personal use;

11   upon the broadcasting of a video program for which there exists at

12   least one request by a user to place the video program into the user's file locker,

13   storing that video program in each requesting user's file locker; and

14   making the stored video program available for viewing by each user

15   whose file locker received the video program.

1   20.   A content storage system for use in a content distribution

2   network, the content distribution network providing broadcast video programming

3   over the network to a plurality of users in accordance with a broadcasting schedule,

4   the system comprising:

5   a plurality of personal file lockers on the network for a plurality of

6   users, each file locker including network storage space allocated for personal use by

7   the corresponding user;

8   a content-storage-request database for tracking requests by the

9   plurality of users for placing broadcast video programs into their file lockers for

10   personal use;

11   computer instructions executable by a computer on the network to,

12   upon the broadcasting of a video program for which there exists at least one request

13   by a user to place the video program into the user's file locker, store that video

14   program in each requesting user's file locker; and

15 computer instructions executable by a computer on the network to
16 make the stored video program available for viewing by each user whose file locker
17 received the video program.

1 21. A method for time-shifted viewing of content for use in a
2 content distribution network, the content distribution network delivering a plurality
3 of broadcast video programs over the network to a plurality of viewers in
4 accordance with a broadcast schedule, the method comprising:
5 allocating a remote personal storage resource on the network for a
6 user;
7 receiving a request by the user for storage of a desired one or more
8 of the broadcast video programs;
9 only if said request is received no later than a scheduled broadcast of
10 the desired program, in response to the request automatically storing the desired
11 video program in the user's remote personal storage resource upon the scheduled
12 broadcasting of the desired video program; and
13 automatically making the stored video program available to the user
14 over the network for viewing at a subsequent time specified by the user.

1 22. The method of claim 21, further comprising:
2 establishing a quantity limit on how much total content can be stored
3 for the user in the remote personal storage resource.

1 23. The method of claim 22, further comprising charging the user
2 a fee in exchange for raising one or more of said limits.

1 24. The method of claim 21, further comprising:
2 establishing one or more limits for each of the stored video programs,
3 including one or more limits selected from: {an expiration date, a maximum
4 permitted number of repeated viewings}.

1 25. The method of claim 24, further comprising charging the user
2 a fee in exchange for raising one or more of said limits.

1   26. The method of claim 21, wherein the desired broadcast video

2 program is a television series, and the user request is a single interactive request for

3 storage of a plurality of installments of the series.

1   27. The method of claim 21, wherein the content distribution

2 network includes broadband network infrastructure selected from one or more of the

3 following: {cable television network, satellite network, telephone network, wireless

4 network, power line network}.

1   28. The method of claim 21, wherein the content distribution

2 network includes packet-switched network infrastructure.

1   29. A method for providing personal video recorder ("PVR")

2 functionality to a user via a content distribution network, comprising:

3   receiving a request by the user for storage of desired video content

4 no later than a scheduled telecast to a plurality of viewers of the desired content;

5   in response to the request and only upon the scheduled telecast of the

6 desired content, and only if the user is one of the viewers who is entitled to receive

7 the desired program at the time of the scheduled telecast, storing the desired content

8 in a remote network-based storage facility for the user;

9   making the stored content available to the user over the network with

10 viewing functionality including at least one or more PVR features selected from:

11 {time-shifted viewing, pause, rewind, fast-forward}.

1   30. The method of claim 29, wherein the request is received from

2 the user during the scheduled telecast; the user request is for storage of a not-yet-

3 telecast portion of the desired video content; and storing the desired content

4 comprises storing said portion.

1   31. The method of claim 29, wherein the user request is for

2 rolling storage of currently viewed video content; and storing the requested video

3 · content comprises storing most recently viewed video content in a buffer of
4 predetermined length in the remote storage facility.

1   32.   The method of claim 31, further includes non-real-time
2 display for the user of at least some of the desired content during the scheduled
3 telecast of said content, in response to an interactive request of the user.

1   33. The method of claim 32, wherein non-real-time display includes
2 at least one or more viewing modes selected from: {pause, rewind, fast forward}.

1   34.   A   network-based   personal   video   recording   system,
2 comprising:
3   a network-based storage resource, configured to store desired video
4 programming in response to a remote user's electronic request;
5   a content distribution network configured to deliver the stored desired
6 programming to the user;
7   wherein said system automatically performs said storing and
8 delivering of the desired programming under the interactive control of the requesting
9 user, without a need for legal permission from a copyright owner of the desired
10 programming to perform said storing and distributing.

1   35.   The method of claim 34, wherein the automatic storing and
2 delivering of the desired video programming under interactive control of the user
3 are performed in a manner intended to qualify as fair use under copyright law.

1   36.   A content storage method for use in a content distribution
2 network, the content distribution network providing broadcast programming over
3 the network to a plurality of users in accordance with a broadcasting schedule, the
4 method comprising:
5   establishing a personal file locker on the network for a user, the file
6 locker including network storage space allocated for personal use by the user;

7   establishing a content-storage-request database for tracking requests

8   by the user for placing broadcast programs into the user's file locker for personal

9   use by the user;

10   upon the broadcasting of a program for which there exists a request

11   by the user to place the program into the user's file locker, storing that program in

12   the user's file locker; and

13   making the stored program available to the user for viewing.

1   37.   A content storage system for use in a content distribution

2   network, the content distribution network providing broadcast programming over

3   the network to a plurality of users in accordance with a broadcasting schedule, the

4   system comprising:

5   a personal file locker on the network for a user, the file locker being

6   a construct created to hold the user's content and including network storage space

7   allocated for personal use by the user;

8   a content-storage-request database for tracking requests by the user

9   for placing broadcast programs into the user's file locker for personal use by the

10   user; and

11   computer instructions executable by a computer on the network to,

12   upon the broadcasting of a program for which there exists a request by the user to

13   place the program into the user's file locker, store that program in the user's file

14   locker, and make the stored program available to the user for viewing.